



countdown

June 11, 2009

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Follow prelaunch milestones below and on the Web

GOES-O satellite, Delta IV mated for June 26 launch



◆ Shuttle Update:

Milestones today and tomorrow for Saturday's STS-127 launch are as follows:

Launch-2 Day (Thursday, June 11)

- Enter first built-in hold at T-27 hours for duration of 4 hours (1 a.m.)
- Flight deck preliminary inspections complete (1 a.m.)
- Clear launch pad of all nonessential personnel
- Perform test of the vehicle's pyrotechnic initiator controllers
- Resume countdown (5 a.m.)
- Begin operations to load cryogenic reactants into Endeavour's fuel cell storage tanks (1 p.m.)
- Enter 4-hour built-in hold at T-19 hours (1 p.m.)
- Demate orbiter mid-body umbilical unit (1:30 p.m.)
- Resume orbiter and ground support equipment closeouts
- Resume countdown (5 p.m.)
- Final preparations of the shuttle's three main engines for main propellant tanking (5 p.m.)
- Begin filling pad sound suppression system water tank (6 p.m.)
- Main Engine avionics, pneumatics and controller checkout complete (7 p.m.)
- Pad sound suppression system water tank filling complete (9 p.m.)

Launch-1 Day (Friday, June 12)

- Begin star tracker functional checks (12:50 a.m.)
- Enter planned hold at T-11 hours for 13 hours, 52 minutes (1 a.m.)
- Activate orbiter's inertial measurement

■ Did You Know? Sunday is Flag Day, commemorating the adoption of the flag of the United States, which happened June 14, 1777, by resolution of the Second Continental Congress.

units

- Activate orbiter's communications systems
- Move rotating service structure to the park position (11 a.m.)
- Perform ascent switch list
- Complete fuel cell flow-through purge
- Resume countdown at T-11 hours (2:52 p.m.)
- Activate orbiter's fuel cells (4:02 a.m.)
- Clear the blast danger area of all nonessential personnel
- Switch Endeavour's purge air to gaseous nitrogen (4:52 p.m.)
- Enter planned 2-hour built-in hold at the T-6 hour mark (7:52 p.m.)
- Launch team verifies no violations of launch commit criteria prior to cryogenic loading of the external tank
- Clear pad of all personnel
- Resume countdown (9:52 p.m.)
- Chill down propellant transfer lines (9:52 p.m.)
- Begin loading the external fuel tank with about 500,000 gallons of cryogenic propellants (about 10:02 p.m.)

For the rest of the prelaunch milestones, go to:

http://www.nasa.gov/mission_pages/shuttle/news/127_milestones.html.

◆ ELV Update: The GOES-O satellite was mated with the Delta IV rocket on Launch Complex-37 at CCAFS on

Tuesday. The Flight Program Verification, an integrated countdown electrical test involving both the Delta IV and GOES-O, is scheduled for today. Testing of the redesigned linear-shape charge for the Delta IV flight termination system was planned for this week. GOES-O is scheduled to launch June 26.

■ Sam's Club — Representatives from Sam's Club will be returning to KSC to extend the opportunity for employees to become club members for the low price of \$40 for 12 months. You'll also receive a free \$10 gift card for joining. Already a member? You can renew your membership and also receive this special offer. Representatives will be at the following sites from 10 a.m. to 3 p.m. on these dates: June 15- ARF Lobby; June 16- OSB 1 Lobby; June 17- O&C Lobby; June 18- SSPF Lobby; June 19- HQ Lobby.

■ KEA Reminder — Lisa Huddleston will present a simulation of "Monte Carlo 101" on June 17 from 10 to 11 a.m., in the Training Auditorium. Questions and comments should be sent to *KSC-Engineering-Academy@mail.nasa.gov*. To view future listings, or video/PDF versions of past KEA events, please visit: <http://kea.ksc.nasa.gov>.

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